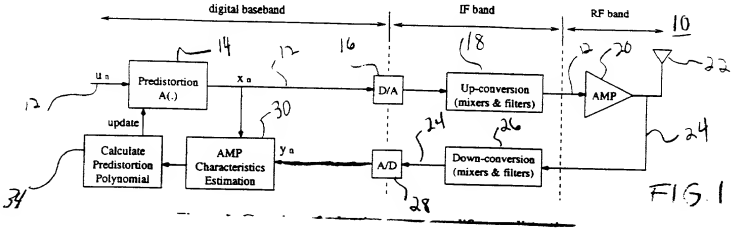
digital baseband
IF band
RF band
10
14
12
16
18
20
22
u_n
Predistortion A(.)
x_n
D/A
Up-conversion (mixers & filters)
AMP
12
update
30
24
26
24
Calculate Predistortion Polynomial
AMP Characteristics Estimation
y_n
A/D
Down-conversion (mixers & filters)
34
28

FIG. 1

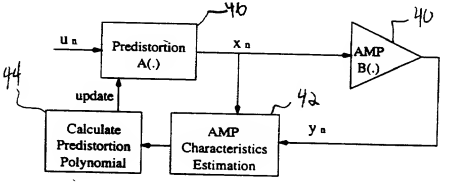
40
40
u_n
Predistortion A(.)
x_n
AMP B(.)
44
update
42
y_n
Calculate Predistortion Polynomial
AMP Characteristics Estimation

FIG. 2

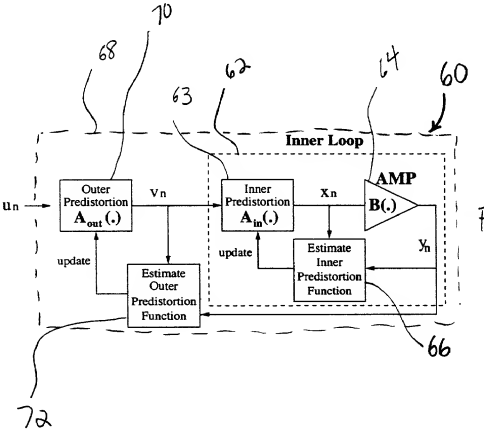
70
68
62
64
60
63
Inner Loop
AMP
Outer Predistortion $A_{out}(.)$
Inner Predistortion $A_{in}(.)$
B(.)
u_n
v_n
x_n
y_n
update
update
Estimate Outer Predistortion Function
Estimate Inner Predistortion Function
66
72

FIG. 3